Virology

Volume 146

1985

EDITORS

W. K. Joklik, EDITOR-IN-CHIEF A. Berk P. W. Choppin R. Haselkorn
D. W. Kingsbury F. Rapp J. G. Shaw M. D. Summers P. K. Vogt

ASSOCIATE EDITORS

S. Adhya
C. Baglioni
A. K. Banerjee
C. Basilico
K. L. Beemon
T. Ben-Porat
K. I. Berns
J. M. Bishop
M. A. Bratt
T. R. Broker
G. E. Bruening
J. S. Brugge
B. J. Carter
J. M. Coffin
J. S. Colter
R. J. Courtney
S. Dales
J. M. Dalrymple
J. M. DeMarchi
W. G. Dougherty
E. Ehrenfeld
F. A. Eiserling
M. K. Estes
A. J. Faras
P. Faulkner
B. N. Fields
S. J. Flint
W. R. Folk
R. I. B. Francki
E. P. Geiduschek
W. Gerhard
R. F. Gesteland
R. M. Goodman
A. Granoff
D. E. Griffin
G. Hager
W. S. Hayward
K. V. Holmes
M. S. Horwitz
M. M. Howe
R. Hull
E. Hunter
T. Hunter
A. O. Jackson
J. E. Johnson
J. M. Kaper
J. D. Keene
E. Kieff
E. Knight, Jr.
R. M. Krug
M. Lai
R. A. Lamb
R. A. Lazzarini
A. D. Levinson
L. Levintow
D. M. Livingston
H. F. Lodish
R. B. Luftig
I. G. Miller, Jr.
L. K. Miller
R. C. Miller, Jr.
S. Millward
P. Model
T. J. Morris
B. Moss
S. A. Moyer
F. A. Murphy
J. R. Nevins
D. J. O'Callaghan
P. Palese
E. Paoletti
C. C. Payne
H. J. Raskas
H. D. Robertson
H. L. Robinson
G. F. Rohrmann
B. Roizman
J. A. Rose
L. B. Rothman-Denes
C. E. Samuel
P. A. Schaffer
M. J. Schlesinger
I. R. Schneider
J. R. Scott
P. B. Sehgal
P. A. Sharp
P. G. Spear
V. Stollar
J. H. Strauss
B. Sugden
M. M. Susskind
R. H. Symons
P. Tattersall
P. Tegtmeyer
D. A. Thorley-Lawson
D. W. Trent
I. M. Verma
E. K. Wagner
E. Wimmer
O. Witte
J. S. Youngner
N. D. Zinder

ACADEMIC PRESS, INC.

(Harcourt Brace Jovanovich, Publishers)

San Diego Orlando New York Austin London
Montreal Sydney Tokyo Toronto

Copyright © 1985 by Academic Press, Inc.

All Rights Reserved

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the copyright owner.

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use, or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee through the Copyright Clearance Center, Inc. (27 Congress Street, Salem, Massachusetts 01970), for copying beyond that permitted by Sections 107 or 108 of the U. S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale. Copy fees for pre-1985 articles are as shown on the article title pages; if no fee code appears on the title page, the copy fee is the same as for current articles.

0042-6822/85 $3.00

MADE IN THE UNITED STATES OF AMERICA

Contents of Volume 146

Number 1, October 15, 1985

Carola Schürmann, Mathias Montenarh, Martin Kohler, and Roland Henning. Oligomerization of Simian Virus 40 Tumor Antigen May Be Involved in Viral DNA Replication ... 1

Hisako Kato, Hisao Fujisawa, and Teiichi Minagawa. Genetic Analysis of Subunit Assembly of the Tail Fiber of Bacteriophage T3 ... 12

Hisako Kato, Hisao Fujisawa, and Teiichi Minagawa. Purification and Characterization of Gene 17 Product of Bacteriophage T3 ... 22

Gian G. Re, Exeen M. Morgan, and D. W. Kingsbury. Nucleotide Sequences Responsible for Generation of Internally Deleted Sendai Virus Defective Interfering Genomes ... 27

C.-H. Hsu, G. G. Re, K. C. Gupta, A. Portner, and D. W. Kingsbury. Expression of Sendai Virus Defective-Interfering Genomes with Internal Deletions ... 38

Oscar Reyes. Virulent Mutants of Bacteriophage ϕ80 ... 50

Peter L. Collins, Kevin Anderson, Stephen J. Langer, and Gail W. Wertz. Correct Sequence for the Major Nucleocapsid Protein mRNA of Respiratory Syncytial Virus ... 69

Alan M. Schultz, Terry D. Copeland, George E. Mark, Ulf R. Rapp, and Stephen Oroszlan. Detection of the Myristylated *gag–raf* Transforming Protein with *raf*-Specific Antipeptide Sera ... 78

Geoffrey R. Kitchingman. Sequence of the DNA-Binding Protein of a Human Subgroup E Adenovirus (Type 4): Comparisons with Subgroup A (Type 12), Subgroup B (Type 7), and Subgroup C (Type 5) ... 90

Matthew J. Dickinson and Rod Townsend. Lysogenisation of *Spiroplasma citri* by a Type 3 Spiroplasmavirus ... 102

Bart Rombaut, Raf Vrijsen, René Delgadillo, Dirk Vanden Berghe, and Albert Boeyé. Characterization and Assembly of Poliovirus-Related 45 S Particles ... 111

William C. Phelps, Steven L. Leary, and Anthony J. Faras. Shope Papillomavirus Transcription in Benign and Malignant Rabbit Tumors ... 120

Yoshihiro Kawaoka and Robert G. Webster. Evolution of the A/Chicken/Pennsylvania/83 (H5N2) Influenza Virus ... 130

Short Communications

R. Virudachalam, Melissa Harrington, and John L. Markley. Thermal Stability of Cowpea Mosaic Virus Components: Differential Scanning Calorimetry Studies ... 138

Olga Gracia and R. J. Shepherd. Cauliflower Mosaic Virus in the Nucleus of *Nicotiana* ... 141

Lesley I. Messer, Kathleen M. Currey, Blanche J. O'Neill, Jacob V. Maizel, Jr., Judith G. Levin, and Brenda I. Gerwin. Functional Analysis of Reverse Transcription by a Frameshift *pol* Mutant of Murine Leukemia Virus ... 146

Michael S. Halpern, Steven McMahon, John Egan, Carol E. Aldrich, William S. Mason, and Donald L. Ewert. Ablation of Humoral Immunity in $15I_5 \times 7_2$ Chickens Is Not Predisposing to the Formation of Subgroup G Virus-Induced Distal Sarcomas ... 153

Michael S. Halpern, John Egan, Steven B. McMahon, and Donald L. Ewert. Duck Hepatitis B Virus Is Tropic for Exocrine Cells of the Pancreas ... 157

Announcement ... 162

Author Index for Volume 146, Number 1 ... 164

Number 2, October 30, 1985

Junji Tanaka, Shigeru Kamiya, Tsutomu Ogura, Hiroshi Sato, Hisashi Ogura, and Motoichi Hatano. Effect of Dimethyl Sulfoxide on Interaction of Human Cytomegalovirus with Host Cell: Conversion of a Nonproductive State of Cell to a Productive State for Virus Replication ... 165

L. Sue Loesch-Fries, Nancy P. Jarvis, Karen J. Krahn, Steven E. Nelson, and Timothy C. Hall. Expression of Alfalfa Mosaic Virus RNA 4 cDNA Transcripts *in Vitro* and *in Vivo* ... 177

Bernd Huber, Evangelia Vakalopoulou, Christa Burger, and Ellen Fanning. Identification and Biochemical Analysis of DNA Replication-Defective Large T Antigens from SV40-Transformed Cells ... 188

Alberto Muñoz, José Luis Castrillo, and Luis Carrasco. Modification of Membrane Permeability during Semliki Forest Virus Infection ... 203

R. Virudachalam, Philip S. Low, Patrick Argos, and John L. Markley. Turnip Yellow Mosaic Virus and Its Capsid Have Thermal Stabilities with Opposite pH Dependence: Studies by Differential Scanning Calorimetry and ^{31}P Nuclear Magnetic Resonance Spectroscopy 213
Deborah A. Buonagurio, Susumu Nakada, Ulrich Desselberger, Mark Krystal, and Peter Palese. Noncumulative Sequence Changes in the Hemagglutinin Genes of Influenza C Virus Isolates 221
Céline Gélinas and Marcel Bastin. Malignant Transformation of Rat Cells by the Polyomavirus Middle T Gene 233
Long-Sheng Chang, Sueihua Pan, Mary M. Pater, and Giampiero Di Mayorca. Differential Requirement for SV40 Early Genes in Immortalization and Transformation of Primary Rat and Human Embryonic Cells 246
Brendan A. Larder and Graham Darby. Selection and Characterisation of Acyclovir-Resistant Herpes Simplex Virus Type 1 Mutants Inducing Altered DNA Polymerase Activities 262
Shinji Harada, Yoshio Koyanagi, and Naoki Yamamoto. Infection of Human T-Lymphotropic Virus Type-I (HTLV-I)-Bearing MT-4 Cells with HTLV-III (AIDS Virus): Chronological Studies of Early Events 272
William G. Dougherty, Richard F. Allison, T. Dawn Parks, Robert E. Johnston, Mark J. Feild, and Frank B. Armstrong. Nucleotide Sequence at the 3′ Terminus of Pepper Mottle Virus Genomic RNA: Evidence for an Alternative Mode of Potyvirus Capsid Protein Gene Organization 282
Gholamreza Darai, Hajo Delius, Jill Clarke, Heiko Apfel, Paul Schnitzler, and Rolf M. Flügel. Molecular Cloning and Physical Mapping of the Genome of Fish Lymphocystis Disease Virus 292
Short Communications
Bellur S. Prabhakar, Marilyn A. Menegus, and Abner Louis Notkins. Detection of Conserved and Nonconserved Epitopes on Coxsackievirus B_4: Frequency of Antigenic Change 302
Samuel L. Pfaff, Ren-Ping Zhou, Judy C. Young, Joel Hayflick, and Peter H. Duesberg. Defining the Borders of the Chicken Proto-*fps* Gene, a Precursor of Fujinami Sarcoma Virus 307
Siu-Pok Yee and Philip E. Branton. Analysis of Multiple Forms of Human Adenovirus Type 5 E1A Polypeptides Using an Anti-Peptide Antiserum Specific for the Amino Terminus 315
Erratum
Volume 144, Number 1, July 15, 1985: Susana López, Carlos F. Arias, John R. Bell, James H. Strauss, and Romilio T. Espejo, "Primary Structure of the Cleavage Site Associated with Trypsin Enhancement of Rotavirus SA11 Infectivity," pp. 11–19 323
Announcement 324
Author Index for Volume 146 326
Subject Index for Volume 146 327